# TRINATIONAL SARDINE FORUM FORO TRINACIONAL DE LA SARDINA



# 6th ANNUAL MEETING

Riviera Social, Civic and Cultural Center, Centro Social, Cívico y Cultural Riviera, Boulevard Lázaro Cárdenas, Ensenada, Mexico November 14 and 15<sup>th</sup>, 2005

#### LOCATION, TIME, AND DATE

The meeting will be held at the Riviera Social, Civic and Cultural Center, Boulevard Lázaro Cárdenas, Ensenada, Mexico. The Center is about a 5 minute walk from the Hotel Cortez, so rental cars are not essential. We will provide transportation for the field trip or for other off-site activities that might be planned. The meeting will begin at 9:00 am on Monday, November 14th and end by 6:30 pm on Tuesday, November 15<sup>th</sup>. We have arranged a field trip to a tuna ranch on Wednesday, November 16<sup>th</sup>.

# Program chairs:

Dr. Nancy Lo, Southwest Fisheries Science Center (SWFSC-NOAA), La Jolla, California Dra. Sharon Z. Herzka, Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE)

# Logistic committee:

Mr. Orlando Amoroso, San Pedro Purse Seine Owners Association

Sr. Raúl Cortez, Pesquera Cortez

Dra. Sharon Z. Herzka (CICESE)

Lic. Martín Gutiérrez, Presidente, Asociación de Armadores de Pelágicos Menores y Representante de B.C. para la Red de Innovación de la Cadena Productiva de Peces Pelágicos Menores de B.C., B.C.S, Son. y Sin

# OFFICIAL DOCUMENTS REQUIRED FOR VISITING MEXICO

There is usually not an immigration stop when you enter Mexico. U.S. and Canadian citizens do not need visas. However, there will be a document check when returning to the U.S. All foreigners to the U.S. must bear a passport. U.S. citizens need either a passport or official U.S. documentation.

#### WORKING GROUPS

The principal goal of the working groups is to promote coast-wide cooperation in producing information needed regarding the biology and dynamics of the population:

WG1: Regional biomass - Nancy Lo

WG2: Stock structure, age structure and adult sampling - Russ Vetter (SWFSC) WG3: Industry trends and issues - Mr. Orlando Amoroso & Lic. Martín Gutiérrez

#### HOTEL INFORMATION

Hotel Cortéz # 1089 Avenida Lopez Mateos, Ensenada\* \$55.00 for single occupancy. Extra \$7.00 charge for double occupancy

Ph: 011-52-646-178-2307 Fax: 011-52-646-178-3918

Reservations: Please give the forum's group reservation number (25844) and the dates of your stay. Participants must use a credit card to reserve or pre-pay in order to ensure hotel room availability **by November 7th**. All major credit cards are accepted. Sharon Herzka needs to have a head count of people who will stay at Hotel Cortez one month prior to the meeting to ensure availability for everyone, so please send an e-mail to Sharon Herzka at sherzka@cicese.mx **by October 14**<sup>th</sup>.

# TENTATIVE AGENDA

A tentative concept agenda is included for your input. If you would like to make a contributed presentation in the session entitled Research Plans and Reports, please e-mail a title and abstract to both Nancy Lo (Nancy.Lo@noaa.gov) and Sharon Herzka (sherzka@cicese.mx) at your earliest convenient prior to **September 30th**. Because the time available for contributed talks is limited, we will accept only a few presentations. To help us prepare the forum report, please submit either an electronic file of abstract or a short version of your presentation to Nancy Lo by **December 16<sup>th</sup>**.

# 2005 Trinational Sardine Forum Agenda

(Updated October 2005)

# Sunday, November 13<sup>th</sup>

Evening arrival of participants in Ensenada. A pick-up service will be provided at 3:30 p.m. and 7:30 p.m. at the SWFSC and at the commuter terminal of the San Diego Airport at 4:00 p.m. and 8:00 p.m. Transportation will take participants to the Hotel Cortez in Ensenada

18:00-21:00 Welcome gathering at Hotel Cortez

# Monday, November 14th

8:30 Registration

| 9:00                               | Welcome and Opening Remarks, Nancy Lo, SWFSC  |  |
|------------------------------------|---|--|
| 9:05                               | Introduction of Municipal President or City Council Members from the local Fisheries Commission, who will formally inaugurate the forum (by invitation, confirmation pending)  Mr. Raúl Cortez, Pesquera Cortez |  |
| 9:15                               | Short statements from special guests:<br>Federico Graef Zielh, Director General, Centro de Investigación Científica y de<br>Educación Superior de Ensenada (CICESE)   |  |
| 9:20                               | Sr. Ramón Corral Ávila, Comisionado Nacional de la Acuacultura y Pesca (CONAPESCA)-(by invitation, confirmation pending)  |  |
| 9:25                               | Dr. William W. Fox, Jr., Director, Southwest Fisheries Science Center, National Marine Fisheries Service,   |  |
| 9:30                               | History and objectives of the forum, John Hunter, SWFSC   |  |
| 9:50                               | Meeting Logistics, Nancy Lo (SWFSC) and Sharon Herzka (CICESE)  |  |
| REGIONAL SARDINE FISHERIES REPORTS |   |  |
| 10:00                              | Gulf of California  | Manuel Nevárez (CRIP-Guaymas)  |
| 10:15                              | Bahía Magdalena   | C. Quiñonez-Velazquez, R. Felix-Uraga and F.N.<br>Melo-Barrera (CICIMAR) |
| 10:30                              | Ensenada (N. Baja)  | Alfredo Cota Villavicencio (CRIP-Ensenada)                               |
| 10:45                              | California  | Kelly M. O'Reilly (CDFG)   |
| 11:00                              | Northwest   | Jean McCrae (ODFW) and Bruce Culver (WDFW)                               |
| 11:15                              | Canada  | Christa Hrabok (DFO)   |
| 11:30                              | Discussion  |  |
| 11:45                              | Break   |  |
|                                    |   |  |

# RESEARCH PLANS AND REPORTS

12:00 Stock structure - General introduction *R. Vetter (SWFSC)* 

| 12:10 | Measuring levels of mitochondrial and nuclear polymorphisms  C. Gutiérrez and A. Rocha (CICESE)  |  |  |
|-------|--|--|--|
| 12:30 | Potentials of otolith trace-elements and stable isotopic ratios for identifying stock structure of Pacific sardines <i>E. Dorval, B. Javor, L. Robertson, and R. Vetter (SWFSC)</i>  |  |  |
| 12:50 | Analysis of carbon and oxygen stable isotope ratios of otoliths of young sardines in Mexican waters: toward the characterization of stock structure and migration patterns <i>S. Valle, S. Herzka, T. Baumgartner (CICESE)</i> |  |  |
| 13:10 | Lunch at the Riviera (\$10.00/person)  |  |  |
| 14:30 | Structure, growth, and biomass of Pacific sardine along the western coast of Baja California  C. Quiñonez-Velazquez, R. Felix-Uraga y F.N. Melo-Barrera. (CICIMAR)   |  |  |
| 14:50 | Can carbon and nitrogen isotopes be used to infer trophic level and movement in Pacific sardine D. Field (SWFSC)   |  |  |
| 15:10 | Biomass estimates N. Lo (SWFSC) and T. Baumgartner (CICESE)  |  |  |
| 15:30 | Stock assessment K. Hill (SWFSC)   |  |  |
| 15:50 | Results of U.S. Northwest surveys B. Macewicz (SWFSC)  |  |  |
| 16:10 | Oregon/Washington R. Emmett (NWFSC)  |  |  |
| 16:30 | Break  |  |  |
| 16:45 | Canada J. Schweigert (DFO)   |  |  |
| 17:05 | N. Baja<br>E. Cotero (CRIP-Ensenada), Y. Green (CRIP-Mazatlán), T. Baumgartner (CICESE)  |  |  |
| CONTI | RIBUTED PAPERS   |  |  |

California sea lion predation on Pacific sardine in the Southern California Bight during 1981-2002 17:25

# M. Lowry (SWFSC)

- On the origin and larval abundance of *Sardinops sagax* in the California Current *M. E. Hernández Rivas* (*CICIMAR*), *W. Watson* (*SWFSC*), *R. L. Charter* (*SWFSC*), *A. Hinojosa-Medina* (*CICIMAR*), *S. Patricia Jiménez- Rosenberg* (*CICIMAR*), and *R. Funes-Rodríguez* (*CICESE*)
- 17:55 Growth of juvenile Pacific sardine (*Sardinops sagax*) in the California Current in 2004-2005 *M. Takahashi (SIO)*
- 18:10 Finding methods of predicting sardine-climate shifts: Analysis of the fishery, physical variables and possible economic benefits *S. Herric*, *J. Norton*, and *J. Mason* (SWFSC)
- 18:25 Mixture distributions and their applications in catch-at-age methods. *Enrigue Morales (CRIP-INP)*
- 18:40 Discussion

#### **INTRODUCTION TO WORKING GROUP 3:**

19:00 Industry trends and issues O. Amoroso & M. Gutierrez

Tuna ranch operations/sardine products

Invited speaker: Mr. F. Charat, President of Maricultura del Norte (?) (by invitation, confirmation pending)

19:30- 21:30 Dinner (\$15.00)

# Tuesday, November 15<sup>th</sup>

- 9:00 Focus Issue: 2006 BC to BC Coast-wide April survey *R. Hewitt (SWFSC)*
- 10:00 Working group discussions

WG 1: Regional biomass - Nancy Lo

WG 2: Stock structure, age structure and adult sampling – Russ Vetter

WG 3: Industry trends and issues - Orlando Amoroso & Lic. Martín Gutierrez

- 13:00 Lunch at the Riviera (\$10.00/person)
- 15:00 Plenary Sessions for reporting results of WG discussions

PS 1: Coast wide survey

PS 2: Industry trends and issues

PS 3: Other issues

# 18:00 Closing remarks

Introduction by Lic. Matin Gutierrez, President, Asociación de Armadores de Pelágicos Menores

Ocean. Prisciliano Meléndrez Barrios, Director General de Ordenamiento Pesquero y Acuícola (CONAPESCA)-(confirmation pending)

Nancy Lo (SWFSC) and Sharon Herzka (CICESE)

19:00 Transportation to San Diego departing from Hotel Cortez

#### **POSTER SESSION** (November 14 and 15):

Posters will be displayed around the meeting hall for the duration of the forum.

Preliminary results on the use of otolith elemental analysis to identify natal origin, migration patterns and stock structure of Pacific sardines in Mexican waters *S. Valle, S. Herzka, and T. Baumgartner (CICESE)* 

Sardine Otolith Chemistry
E. Dorval and B. Javor (SWFSC)

# Wednesday, November 16<sup>th</sup>

AM (WHAT TIME)?? Field trip to Maricultura del Norte tuna ranch if weather permits O. Amoroso, M. Gutierrez, and R. Cortez

# 14:00 Transportation to San Diego departing from Hotel Cortez

\*Ensenada is a beautiful city located in the northwest of Mexico, 60 miles south of the Mexico-US border, near the city of San Diego. The city faces Todos Santos Bay. Population size is about 300,000 with an annual growth rate of 4%. Tourism, fishing, agriculture, and industry are the most important factors in the economical development of the city. The confluence of academic, cultural and research activities in the area is outstanding. Various academic campuses, including the Center for Scientific Research and Higher Education of Ensenada (CICESE), the University of the Baja California and National University of Mexico's Institutes of Astronomy and Physics represent major features of the city.

#### Directions to Ensenada:

Take Interstate 5 south from downtown San Diego to get to the border in 30 minutes. After crossing the border, it is straightforward to connect to Scenic Highway 1, a toll road in excellent condition that runs parallel to the coast from Tijuana to Ensenada (tolls cost about \$7.50 total between Tijuana and Ensenada). It takes about 1 hour to reach Ensenada upon connecting to the toll road. Various car rental companies will allow their vehicles to be driven into Mexico, although an extra fee is charged for Mexican insurance (for example, Dollar). In addition, transport to and from the San Diego Airport and Southwest Fisheries Science Center will be arranged on Sunday November 13th (afternoon and evening), the evening of the 15th once the forum is over, and on Wednesday the 16th after the potential

field trip to local tuna ranches. Please write to Sharon Herzka at sherzka@cicese.mx for specific directions if you intend to drive and for requesting transportation to and from San Diego (include pick-up location and preferred time).